

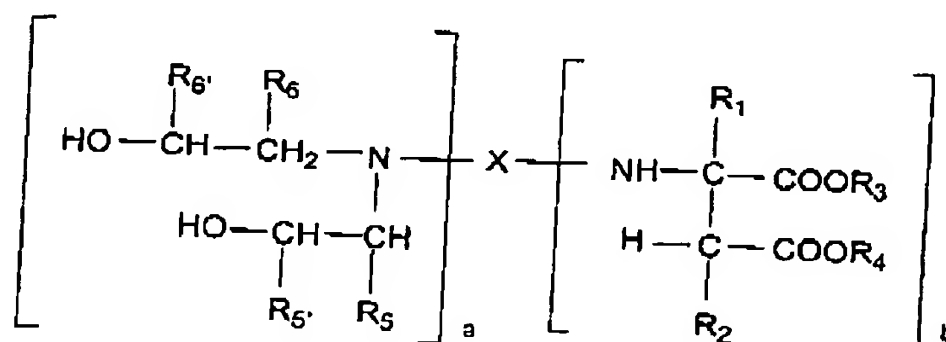
REMARKS

Claims 1-4 are pending in the application.

Rejections under 35 U.S.C. § 103(a)

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,243,012 to Wicks et al. (hereinafter "Wicks"), 5,236,741 to Zwiener et al. (hereinafter Zwiener '741"), or 5,126,170 to Zwiener et al. (hereinafter Zwiener '170").

The present invention is directed to an aspartate of the formula:



where

X represents an m-valent organic residue obtained by removing the primary amino group or groups from a mono or polyamine which has (cyclo)aliphatically bound amino groups and a number average molecular weight of 60 to 6000, and which may contain further functional groups that either are reactive with isocyanate groups or are inert to isocyanate groups at temperatures of up to 100°C,

R₁ and R₂ may be identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less,

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R_3 and R_4 may be identical or different and represent organic groups which are inert towards isocyanate groups at a temperature of 100°C or less,

R_5 represents hydrogen or together with R_5 and the carbon atoms to which they are connected forms a six-membered cycloalkyl group, with said cycloalkyl group being substituted with from 0 to 3 alkyl groups having from 1 to 3 carbon atoms,

R_5 represents a moiety selected from the group consisting of
i) C_1 to C_8 alkyl groups which may be interrupted with an oxygen atom,
ii) C_6 to C_{10} aryl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms and iii) C_6 to C_{12} cycloalkyl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms,

R_6 represents hydrogen or together with R_6 and the carbon atoms to which they are connected forms a six-membered cycloalkyl group, with said cycloalkyl group being substituted with from 0 to 3 alkyl groups having from 1 to 3 carbon atoms,

R_6 represents a moiety selected from the group consisting of
i) C_1 to C_8 alkyl groups which may be interrupted with an oxygen atom,
ii) C_6 to C_{10} aryl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms and iii) C_6 to C_{12} cycloalkyl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms,

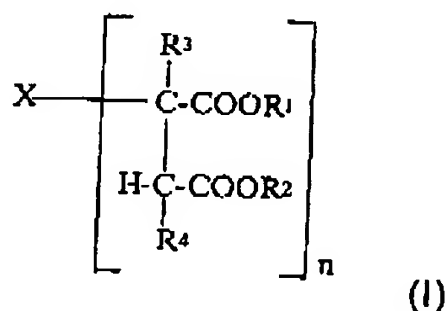
with the proviso that R_5 and R_6 are the same and R_5 and R_6 are the same, and

a and b represent integers of from 1 to 5, provided that the sum of a and b is from 2 to 6.

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Wicks

Wicks discloses a coating composition for the preparation of a polyurea coating which contains a) a polyisocyanate component, b) at least one compound corresponding to the Formula I



where X represents an organic group which has a valency of n and is inert towards isocyanate groups at a temperature of 100°C or less, R¹ and R² may be identical or different and represent organic groups which are inert towards isocyanate groups at a temperature of 100°C or less, R³ and R⁴ may be identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less and n represents an integer with a value of at least 2, and c) 0.001 to 5 weight percent, based on the weight of components a) and b), of a tin(IV) compound which is a catalyst for the reaction between isocyanate groups and hydroxyl groups.

The Examiner, in response to Applicants previous response, states that "the aspartate of the claimed formula must be considered inherent in the prior art with the claimed definitions of each variation." Applicants request reconsideration.

The Examiner appears to have taken the disclosure in Wicks out of context. As indicated above, Wicks clearly requires that X represents an organic group which is inert towards isocyanate groups. For the Examiner to interpret Wicks in a way that is contrary to this statement clearly is not consistent with the disclosure in Wicks.

MPEP § 706.02(j) states (citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)) that in order to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either

in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

The Examiner has not provided any suggestion or motivation as to why one skilled in the art would disregard a basic premise in Wicks, i.e., that X represents an organic group which is inert towards isocyanate groups. Also, the Examiner has not provided any reasonable expectation of success for modifying Wicks as he proposes. Thus, Wicks does not teach or suggest the claim limitation that X contain amino groups, i.e., groups that are reactive (not inert) towards isocyanate groups.

The Examiner indicates that Wicks discloses including polyether polyols. However, there is no disclosure in Wicks refuting the basic premise that X represents an organic group which is inert towards isocyanate groups, which teaches away from the present invention.

In Wicks, the group -X is inert towards isocyanate groups. The corresponding group in the presently claimed aspartate is $-X[N-(CH_2CH_2OH)_2]_a$. As one skilled in the art will readily recognize, the hydroxyl groups in the presently claimed structure will readily react with isocyanate groups. Thus, the presently claimed aspartate does not contain a group X that is inert towards isocyanate groups as required in Wicks.

As indicated above, the Examiner has failed to provide a *prima facie* case of obviousness.

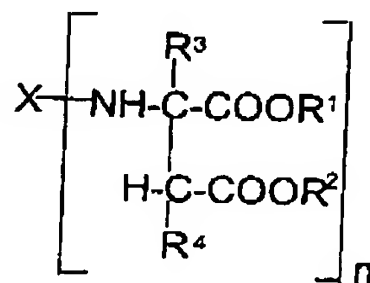
For all of the reasons stated above, the rejection of Claims 1-4 under 35 U.S.C. § 103(a) over Wicks should be withdrawn.

Zwiener '741 and 170

Zwiener '741 and '170 both disclose a process for preparing a polyurethane coating by coating a substrate with a coating composition containing a) a

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polyisocyanate component and b) an isocyanate-reactive component containing at least one compound corresponding to Formula I



where X represents an organic group which has a valency of n and is inert towards isocyanate groups at a temperature of 100°C or less, R¹ and R² may be identical or different and represent organic groups which are inert towards isocyanate groups at a temperature of 100°C or less, R³ and R⁴ may be identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less and n represents an integer with a value of at least 2, and curing the coating composition at a temperature of °C or less.

The Examiner, in response to Applicants previous response, states that "the aspartate of the claimed formula must be considered inherent in the prior art with the claimed definitions of each variation." Applicants request reconsideration.

The Examiner appears to have taken the disclosure in Zwiener '741 and '170 out of context. As indicated above, Zwiener '741 and '170 clearly require that X represents an organic group which is inert towards isocyanate groups. For the Examiner to interpret Zwiener '741 and '170 in a way that is contrary to this statement clearly is not consistent with the disclosure in Zwiener '741 and '170.

MPEP § 706.02(j) states (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)) that in order to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim

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limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

The Examiner has not provided any suggestion or motivation as to why one skilled in the art would disregard a basic premise in Zwiener '741 and '170, i.e., that X represents an organic group which is inert towards isocyanate groups. Also, the Examiner has not provided any reasonable expectation of success for modifying Zwiener '741 and '170 as he proposes. Thus, Zwiener '741 and '170 do not teach or suggest the claim limitation that X contain amino groups, i.e., groups that are reactive (not inert) towards isocyanate groups.

The Examiner indicates that Zwiener '741 and '170 disclose including polyether polyols. However, there is no disclosure in Zwiener '741 or '170 refuting the basic premise that X represents an organic group which is inert towards isocyanate groups, which teaches away from the present invention.

In Zwiener '741 and '170, the group -X is inert towards isocyanate groups. The corresponding group in the presently claimed aspartate is $-X[N-(CH_2CH_2OH)_2]_n$. As one skilled in the art will readily recognize, the hydroxyl groups in the presently claimed structure will readily react with isocyanate groups. Thus, the presently claimed aspartate does not contain a group X that is inert towards isocyanate groups as required in Zwiener '741 or '170.

Further, because both of Zwiener '741 and '170 require a structure inert towards isocyanate groups and the present invention claims a structure that is reactive with isocyanate groups, Zwiener '741 and '170 teach away from the present invention and cannot render Claims 1-4 obvious.

As indicated above, the Examiner has failed to provide a *prima facie* case of obviousness.

For all of the reasons stated above, the rejection of Claims 1-4 under 35 U.S.C. § 103(a) over Zwiener '741 and '170 should be withdrawn.

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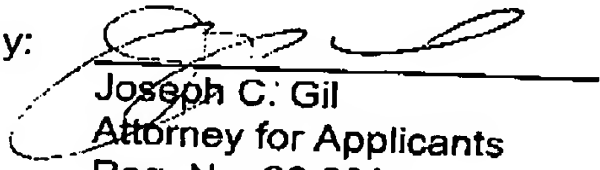
CONCLUSION

Applicants request reconsideration of the rejections and submit that the present application is in condition for allowance.

For all of the reasons indicated above, reconsideration of the rejections and a Notice of Allowance are respectfully requested for Claims 1-4. If the Examiner is of the opinion that the present application is in condition for other than allowance, he is requested to contact the Applicants' agent at the telephone number given below so that additional changes to the claims may be discussed.

Respectfully submitted,

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